BEFORE THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA COLUMBIA, SOUTH CAROLINA

HEARING #22-11983

MARCH 28, 2022

10:30 A.M.

ND-2022-6-C:

CHARTER COMMUNICATIONS, INC. — Allowable Ex Parte Briefing Regarding (1) Charter's business profile and impact both nationally and in South Carolina; (2) Challenges, opportunities, and solutions to reducing the "digital divide" and timely deploying broadband services where they are needed most; (3) Charter's commitment, progress, and ideas toward the timely deployment of broadband services in South Carolina.

ALLOWABLE EX PARTE BRIEFING

COMMISSION MEMBERS PRESENT: Justin T. WILLIAMS, CHAIRMAN Florence P. Belser, Vice Chair; and Commissioners Carolyn L. 'Carolee' Williams, Stephen M. 'Mike' Caston, Thomas J. 'Tom' Ervin[A/V], Headen B. Thomas, and Delton W. Powers, Jr.

ADVISOR TO COMMISSION: Sandra V. Moser Staff Counsel

STAFF PRESENT: Jocelyn Boyd, Chief Clerk/Executive Director; Randy Erskine, Information Technology Staff; Melissa Purvis and Gwen Richardson, Livestream Technical Staff; Officer Joe Biggs, Security Staff; and Jo Elizabeth M. Wheat, CVR-CM/M|GNSC, Court Reporter

APPEARANCES:

ANDREW J. D'ANTONI, ESQUIRE, legal representative, and MITCHELL WILLOUGHBY, ESQUIRE, presenter and legal representative of/for CHARTER COMMUNICATIONS, INC., together with PRESENTERS MARVA JOHNSON [Group VP - State Government Affairs], MICHAEL CHOWANIEC [VP - State Regulatory Affairs], and BEN BREAZEALE [Sr. Director - State Government Affairs].

CHRISTOPHER M. HUBER, ESQUIRE, Designee of the Executive Director of the South Carolina Office of Regulatory Staff

Public Service Commission of South Carolina

I N D E X

PAGI
OPENING MATTERS
<u>PRESENTATION</u> 8-72
Question(s)/Comment by Commissioner Caston
Question(s)/Comment by Commissioner Powers
Question(s)/Comment by Commissioner Caston
Question(s)/Comment by Commissioner C. Williams 36
Question(s)/Comment by Chairman J. Williams 38
Question(s)/Comment by Commissioner Caston
Question(s)/Comment by Commissioner Powers 49
Question(s)/Comment by Commissioner Thomas 55
Question(s)/Comment by Commissioner Powers 58
Question(s)/Comment by Commissioner C. Williams 65
Question(s)/Comment by Commissioner Caston69
CLOSING MATTERS 71
REPORTER'S CERTIFICATE72
Note: For identification of any additional referenced materials and/or links for same, please see correspondence to be filed by the ORS Designee.
Please note the following inclusions/attachments to the record: • Presentation Slides (PDF)

2

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PROCEEDINGS

CHAIRMAN J. WILLIAMS: Good morning, ladies and gentlemen. Welcome to the Public Service

Commission of South Carolina. We're here for an allowable ex parte briefing.

Before we get started, please join me in a brief moment of silence.

[Brief pause]

Thank you, very much. We're going to call roll. Present in the hearing room we have Commissioners representing Districts 1, 2, 3, 5, 6, and 7. Joining us virtually we have Commissioner Ervin.

Attorney Moser, if you would, please read the docket.

MS. MOSER: Thank you, Mr. Chairman.

Good morning, Commissioners, and to all who are present here today either in person or virtually. Today is Monday, March 28th, 2022, and we are here in the Commission's hearing room pursuant to a Notice of Request for an Allowable Ex Parte Briefing from Charter Communications, Incorporated.

The subject matter noticed to be discussed today relates to Charter Communications, Inc., as a

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business here in South Carolina and nationally.

This, I would remind everyone, is a briefing and not a hearing. The briefing must be conducted in compliance with the provisions of South Carolina Code Section 58-3-260(C), and the requirements of that statute are, in part, that the allowable ex parte briefing be confined to the subject matter which has been noticed. Charter Communications, Inc., shall present information to the Commission at this allowable ex parte on the following items: First, Charter's business profile and its impact, both nationally and in South Carolina; second, its challenges, opportunities, and solutions to reducing the digital divide and timely deploying broadband services where they are needed most; third, Charter's commitment, progress, and ideas toward the timely deployment of broadband services in South Carolina.

I would, therefore, ask the presenters, the Commissioners, and Staff to please refrain from discussing any matters not related to the specific topics.

The statute prohibits any presenter,

Commissioners, or Commission Staff from requesting
or giving any commitment, predetermination, or

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prediction regarding any action by any Commissioner as to an ultimate issue which either is or is likely to come before the Commission.

I would also ask the presenters, the Staff and the Commissioners to refrain from referencing any report, article, statute, or document of any kind that are not included in today's presentation. A copy of any document which is referred to during the briefing must be provided to the Office of Regulatory Staff for inclusion into the record, which will be certified by [sic] the Chief Clerk of the Commission, Ms. Jocelyn Boyd.

If anyone, during the course of this briefing, exceeds the scope or does not comply with or fails to conduct themselves within the provisions of South Carolina Code Section 58-3-260, governing allowable ex parte briefings, it is expected that a contemporaneous objection will be made.

And, finally, everyone in attendance today either in person or virtually - must sign in or register. Everyone in the hearing room or watching virtually must read, sign, and return the form which you were given at the door or the form which will be e-mailed to you for your virtual appearance, which will include instructions and the

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deadline for its return. It is required by law for each attendee — whether attending virtually or in person — to certify that the requirements contained in Section 58-3-260(C) have been complied with in this presentation.

Thank you-all for your time and your attention. Thank you, Mr. Chairman. I'll turn it back to you.

CHAIRMAN J. WILLIAMS: Thank you, Attorney Moser.

Office of Regulatory Staff?

MR. HUBER: Good morning, Mr. Chairman, Madam Vice Chair, members of the Commission. My name is Chris Huber and I'm General Counsel for the South Carolina Office of Regulatory Staff. I'm here today as the designee of ORS's Executive Director for the purposes of today's briefing.

I have nothing further at this time. you.

CHAIRMAN J. WILLIAMS: All right. Attorney Willoughby?

MR. WILLOUGHBY: Good morning, Mr. Chairman, Vice Chair, members of the Commission. Thank you very much for allowing us to appear before you today.

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My name, for the record, is Mitchell Willoughby. I'm an attorney, here in Columbia, South Carolina, with the law firm of Willoughby & Hoefer. With me today is Andrew D'Antoni, an attorney with our firm, as well.

I will, at this time, Mr. Chairman, introduce our members from Charter that will be presenting, and will allow them to then do the presentation. I'll also be making a part of the presentation.

With us today is Marva Johnson, who is Group Vice President for State Government Affairs, with Charter. Next to her is Mike Chowaniec, who is Vice President, State Regulatory Affairs, for Charter. And next to Marva on the other side is Ben Breazeale, who is Senior Director, State Government Affairs, for South Carolina. And it's all of our pleasure to appear before you today.

Mr. Chairman, if this is okay with you and the members of the Commission, when I cover a couple of slides that will be part of the presentation, I'll do so from the bench there [indicating], if that's okay with the Commissioners.

CHAIRMAN J. WILLIAMS: That's fine.

MR. WILLOUGHBY: Thank you, very much. with that, I think our presentation is ready to be

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brought up, and then we will turn it over to Marva, who will make our opening remarks and begin the presentation.

CHAIRMAN J. WILLIAMS: Thank you.

[Reference: Presentation Slides 1-2]

MS. MARVA JOHNSON [CHARTER]: Thank you-all -[indicating]. Thank you-all. This is very exciting for us. If you haven't heard, we are really leaning in on the broadband challenge and working as hard as we can to help solve the digital divide.

We had an opportunity to spend some time with a few of you at SEARUC last year. We shared some data points about some of the challenges as it relates to the digital divide nationally, as well as specifically within South Carolina and our efforts in South Carolina. I guess some good reading references, the Broadband Crash Course and Farm Fresh Broadband that I think are going to help us move forward well here. But today we're going to talk about Charter and we're going to talk a little bit about our national footprint, specifically what we're doing here in the State of South Carolina. We're going to talk about the broadband digital divide. We're going to talk

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about some solutions to address the challenge here in South Carolina. And then we're going to talk about how we believe we're helping to make sure we're ready to move forward to close that divide as swiftly as possible.

Just to keep it interesting, we're going to flip between presenters, here, so hopefully it will make it more interesting and give you a greater selection of thoughts here. So thanks again, and we are very honored to have the opportunity to share this discussion with you-all today.

[Reference: Presentation Slide 3]

MR. MICHAEL CHOWANIEC [CHARTER]: morning. My name is Mike Chowaniec. Mr. Chairman, members of the Commission, pleased to be with you here today.

I will touch briefly on — the slide disappeared on me. There we go - no, the one before that, please. There we are.

So, to briefly just introduce ourselves at a national level, we have a couple of metrics there that I think give you a sense of who we are as a company nationally, and Ben will touch upon the state-specific metrics in a second.

So, interesting, as you look at those numbers,

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a couple of things that stand out: One is - and this is consistent with kind of how the industry has trended, you know, over the last decade. are very much a broadband company, right? I think folks look at us as, you know, a cable company, but if you look at those metrics, literally we have twice as many broadband customers today, relative to what we provide in terms of video service. not a surprise, but it is a pretty startling metric if you look at how this industry has evolved over the last few years.

The other thing that stands out there — and for those of you who may be in our service area here in South Carolina — we are very much a growing mobile company. That number, as we approach 3 million customers, is pretty remarkable in a relatively short period of time. And I think what's happening there is it's a blend of us offering very attractive mobile offerings. We're competing on price, right? We're giving folks another option on wireless, and it presents us with an interesting business opportunity because we're blending leveraging Verizon's network, where we have a business relationship with them, and what we have as our own infrastructure. So it's really

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positioned us very effectively in the wireless space and I think, as you look at larger issues here in South Carolina, the State and we as a company have an opportunity to support you and for you to derive benefits from the fact that we can bring economies of scale. We're well-capitalized and we're constantly innovating and making the investments we need to deliver new products and services to your State.

[Reference: Presentation Slide 4]

MR. BEN BREAZEALE [CHARTER]: Good morning, Commissioners. My name is Ben Breazeale. I'm the local Senior Director here in South Carolina for Charter, and I have the opportunity to describe to you a little bit more about our profile in the State.

We are large nationally, as Mike talked about, but the interesting thing about Charter and the cable company in South Carolina, in general, is that we started through small entrepreneurs back in the '70s, so we are in a lot of small communities already. Obviously, the point of today's topic is rural broadband. We are already in a lot of small towns - Quinby, Lane, Coward, Cowpens - all across the State, because it started with small rural

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communities that couldn't get cable television.

Obviously, now, we're a broadband company and we are going to be making extensive growth into much more rural areas, much more lower-density areas than we are now. But even though we are a large, economy-of-scale company, we — our roots actually start very rural.

We have 954,000 customers served in South Carolina. We have 3,165 employees as of December 31st of 2021. And you may have seen in the news last week we just announced 350 new jobs in our West Columbia location, so that number will be 3500 employees by the end of the year. We're going to service all the broadband growth.

We paid \$110 million in taxes and fees, last year, and we made \$243 million in capital investment in South Carolina.

So, again, our focus now is expanding broadband access across South Carolina. You see our existing footprint in the slide, in the dark blue. We'll go into this a little bit more in the presentation, but our job is to move into the more lower-density areas, but we have a great basis of coverage in South Carolina today to help solve this problem. Thank you.

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fact that we're being recognized on that basis.

[Reference: Presentation Slides 6-7]

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MS. MARVA JOHNSON [CHARTER]: That positions us well to go into a more in-depth conversation about South Carolina and the digital divide here.

So, as both Mike and Ben mentioned, we are committed to serving rural America. About 30 percent of our existing network is already in rural locations. And as we talked about, even our build-outs here in South Carolina for 2021, alone, we extended our plant to 44,000 unserved locations here in the State of South Carolina; all of those locations were not rural locations, but we're constantly making investment and trying to reach more homes and more businesses to extend service places where there was not service before.

And when we looked at the — if you look at the FCC's most recent reports, the FCC's Broadband Deployment Report, which was released earlier this year — or, earlier in 2021 — estimated that there's 14½ million Americans who don't have access to broadband service 25/3. Right here in South Carolina, that's about 451,000 South Carolinians who do not have access to 25/3 speed, and that's, again, based on the Federal Communications Commission's Broadband Deployment Report statistics.

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[Reference: Presentation Slide 8]

MR. MICHAEL CHOWANIEC [CHARTER]: And on this - [indicating]. On this slide we're referencing a report that you have access to, and we're happy to answer questions about, but I think the takeaways here are really, I think, what all of you know intuitively, right, which is there is a real economic cost to delays in broadband deployment. I mean, it obviously impacts people's lives in a very real way. For those of us who have school-age children, in particular, what they need to do and what we need to do as parents, right, in terms of managing their education, is really - is something that you can't take for granted. And as I often say, if I wasn't e-mailing with a teacher or annoying my kids by monitoring their grades, right, which I know their grades before they do, you know, how would one, you know, manage their education, right? It kind of — we take it for granted, right?

And this, I think, tags, you know, for your benefit, the real economic cost of delay, right? It's an economic cost to those people who are directly impacted — those families, those businesses — but also to society in general, right?

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We're not benefiting from them being connected, and that's costing all of us and costing the State of South Carolina.

And, you know, we're honored by the fact that, you know, the federal government - and we're going to touch on other investments today — the federal government stepped up, you know, with RDOF, which is the Rural Digital Opportunity Fund, and South Carolina was a large recipient of those funds. We're honored by the fact that we were a major awardee of those funds, and that's something that we're going to be working on in the coming years, as we continue to expand our network here in the State.

[Reference: Presentation Slide 9]

MS. MARVA JOHNSON [CHARTER]: And we've talked a bit about network expansion, and we'll go through that in more detail and talk about our investment and continued build-out here in South Carolina.

But we understand that it's not about access for every family. For many families, it's actually about affordability. And so, as we look to do our part in extending service to all families, we're very pleased to be a part of the affordability -Affordable Connectivity Program. And what it

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actually gives us an opportunity to do is to merge two programs. We, for years, had our Spectrum Internet Assist Program, which provides service for families who are free- and reduced-lunch eligible, also for elderly individuals who are SSI-eligible. And that service we priced in the marketplace at \$17.99 a month, and that allowed these families to have access to 30 meg. service.

What we're now adding to that affordability platform and portfolio for our customers, in all markets — not just select markets, so, as we extend our service into rural areas and as we build out our RDOF locations, not only will those residents have access to our ETC services for telephone service, they'll also have access to our Spectrum Internet Assist Program, as well as the Affordable Connectivity Program, which is the new program that the Federal Communications Commission has transitioned to.

The wonderful thing about the Affordable

Connectivity Program — affectionately known as

"ACP" — is that allows the consumer to choose the service that works for their family. So, it's not a preset package or speed. Those families get a preset \$30 credit, so that if you'd like to have a

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[A/V] AUDIO- AND/OR VIDEOCONFERENCED PARTICIPATION

higher-speed tier for your family, you can make that choice; you still get the \$30 credit.

It also allows these families to have multiple options to have access to the program. So, in other words, if you're eligible for our Spectrum Internet Assist Program, then you're also going to be eligible for the ACP program. It extends the program to families who are eligible under SNAP, some of the other tribal programs that give you access to broadband discounts. So it gives us a much broader range of customers who will also, now, be eligible for the \$30 credit under ACP.

COMMISSIONER CASTON: May — excuse me, Chairman, if I might.

MS. MARVA JOHNSON [CHARTER]: Yes.

COMMISSIONER CASTON: And I don't know who would or could answer. You know, we've talked about rural areas, rural locations, and digital divide. And I've heard that a lot — not here, but I mean just a lot in the last, you know, few months and everything else. And I've never really heard anyone kind of define exactly what that is. What — what does that mean, I guess? It's been mentioned like rural locations and rural areas. I mean, I grew up in the country in Chester. You can't get

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much more rural than that. But I don't know what else that includes in, like, this digital divide. I think I know, but...

MS. MARVA JOHNSON [CHARTER]: Commissioner Caston, I love that you asked that question. I gave a similar presentation to an economic group a couple of months ago in Florida, and that was — we actually had a slide on that, because it varies in terms of actual definitions, but the broadly accepted expectation of what you're referencing when you're referring to the "digital divide," it includes a couple of components.

The first component is, of course, whether you have access. And so a lot of what we're solving for, through these broadband grant programs, is making sure that individuals have access to broadband. And the Federal Communications

Commission has defined "broadband" as service that is 25 megabits per second download and 3 megabits per second upload.

Now, many of you who are enjoying Internet service at home would probably question whether that's the right speed. And if you look to some of the more recent guidance and some of the more recent investment commitments through some of the

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one-time funds coming from the federal government, and even for our State grant program here in South Carolina, I think that we're looking more towards speeds that are 100 megabits per second download and 10 megabits per second upload, in order to ensure the full access to services like telehealth or full access to opportunities to run a business.

So we first have the access portion of the digital divide.

The second component of the digital divide is affordability. Just because you can bring it to my home doesn't mean I can really access it and I can really enjoy the service. And so, when we talked about our Spectrum Internet Assist Program and the Affordable Connectivity Program through the Federal Communications Commission, those types of programs help solve for the affordability component of the digital divide. And in many ways, the affordability component is actually larger than the access component, but both portions of the challenge need to be solved for.

And then, lastly, the third component of the digital divide that we're also trying to help solve for is digital literacy. So we have, you know, people who have access, who have solutions for

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affordability, but maybe cannot understand or don't have the educational background or the tools or the training in order to make the most out of that connectivity. As much as we believe that everybody wants our gigabit service and it's all about our gigabit service, it's really not about that; it's really about access to education, access to healthcare. So this digital literacy component is a

component where we work with third parties, or third-party organizations on their own try to reach into communities and find these individuals who may not understand the full scope of the value the connectivity services can bring for them and their families. And so they do digital literacy Some of them also offer connected training. devices, so that these families have access to tools, to allow them to connect to the Internet, to use that access in a way that's meaningful and productive for their families.

So when we talk about the digital divide, we're talking about all three of those challenges and how they, you know, collectively leave people disenfranchised.

And thank you for that question, Commissioner,

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because it is - you know, it is a presumptive situation that we made it, in putting the slides together, and I'm glad you gave us a chance to share that.

COMMISSIONER CASTON: Well, and when I mentioned rural or rural areas, you know, I believe I was reared in one, but I didn't know it at the time. But being a Clemson man and coming to Columbia, Clemson is considered rural to a lot of USC folks. so I'm not real sure whether we are or are not. But just kind of trying to better understand what that is. Thank you.

MS. MARVA JOHNSON [CHARTER]: My family is from Blakely, Georgia, Early County. So believe me, I know about living in rural areas. another interesting perspective when we are looking at access concerns, more than 20 percent of the people who don't have access are in rural areas. And, you know, it varies by state, and that number grows, but we also have some people who are in pockets in areas that are not rural, but are — you know, in suburbs that aren't really heavily densely populated. So when we speak a lot, we speak to both terms. We use both the term "rural" and the term "unserved." The term "unserved" is a term we

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use more broadly, regardless of whether you're specifically in a geographically rural area or in maybe just an area that's just not densely populated but is not specifically rural. But we use "unserved" to mean anybody, wherever you are, that doesn't have access to 25/3.

MR. WILLOUGHBY: And, Marva, I can add to Commissioner Caston's comments and relate to them, because, Commissioner, I grew up down a dirt road in rural Horry County, so I know exactly of what you speak. I'm very familiar with Chester County, too. And so, when you're down a dirt road and you're one of a few families living down there, then obviously the density of population means you're going to be the last to get telecommunications service, Plain Old Telephone Service. I remember having a party line. So those sorts of things exist. And it's - you deal with it at every area of utility that you — utilities that you regulate. Water and sewer, if you're the last person on the line, extending that line gets to be very expensive.

But what has happened today is everybody realizes that broadband is absolutely not a luxury but is essential to people being able to compete.

ACCEPTED FOR PROCESSING - 2022 March 31 3:45 PM - SCPSC - ND-2022-6-C - Page 24 of 72

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And, again, thank you for your question, Commissioner.

And just to speak a little bit more about our efforts to bridge the digital divide, I think we wanted to talk about how we support adoptionrelated initiatives. And for -

COMMISSIONER POWERS: Ms. Johnson?

MS. MARVA JOHNSON [CHARTER]: I'm sorry.

COMMISSIONER POWERS: Mr. Chairman? I grew up in Clio, so — maybe I'm backing up, and maybe it's something you're going to get to. But I think Mr. Chowaniec mentioned infrastructure, and I'm very Some things I've read somewhere or just curious. some thoughts I've had about — with the highway construction, is this something that you'll be able to run along with, or will there be buried lines, or what sort of plans those are.

MR. BEN BREAZEALE [CHARTER]: I'm going to get

1	into that in —
2	COMMISSIONER POWERS: Okay.
3	MR. BEN BREAZEALE [CHARTER]: — just a couple
4	of slides, Commissioner.
5	COMMISSIONER POWERS: That's great. Thank
6	you.
7	MR. BEN BREAZEALE [CHARTER]: If that's okay.
8	MS. MARVA JOHNSON [CHARTER]: Yeah. He's even
9	going to talk about Florence County, maybe one you
LO	care about.
L1	COMMISSIONER POWERS: Marlboro.
L2	MR. BEN BREAZEALE [CHARTER]: It's an
L3	excellent question. It's perfectly in line with
L4	infrastructure.
L5	MS. MARVA JOHNSON [CHARTER]: Yeah.
L6	COMMISSIONER POWERS: Thank you.
L7	MS. MARVA JOHNSON [CHARTER]: Fantastic.
L8	[Reference: Presentation Slide 10]
L9	And so, coming to bring this back to the
20	adoption initiatives, we've got — in addition to
21	our Spectrum Internet Assist Program, we've also
22	got a program called the Spectrum Digital Education
23	Grants, and that program is really designed to help
24	with the digital-literacy component.
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to help with the digital-literacy concerns, Charter has spent over seven — or, invested over \$7 million in these programs, and we've awarded a million digital education grants to 49 nonprofits across the country. Right here in South Carolina, we've invested \$35,000 in a partnership with the Palmetto Care Connections to advance digital-literacy goals, and \$12,000 in the communities and schools in South Carolina, again, to advance digital-literacy goals.

[Reference: Presentation Slide 11]

And then, one program we're very excited about, and this will be an important component as we move forward with some of our more rural builds, is our Spectrum Community Assist. This is a new program that was launched at the end of last year. And with our Spectrum Community Assist Program, we'll be helping communities that may be underserved in terms of opportunity, as we extend broadband in these areas, or with our existing broadband networks in these areas. We're going to be working with a community center in these designated locations. We'll be doing some jobskills training; we'll be making physical improvements to the community center, itself; we'll be maintaining broadband connectivity for those

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facilities; and then we'll also make in-kind contributions. And the expectation is that, through these programs and through these partnerships, not only will we extend digital literacy, we will also extend the true value of this connectivity. We will help people get jobs; we will help people change their economic situation; we'll help improve some of the educational outcomes in these areas.

And so we're looking to choose 100 communities across the country for our - actually, for the next three to five years, as we look to deploy this, and then there will also be a number of communities that we may add in, as we look to work on some projects, like we had talked about doing for Saluda County here in South Carolina. So that's a program that we're going to be leaning in on, in 2022 and forward.

[Reference: Presentation Slides 12-13]

MR. BEN BREAZEALE [CHARTER]: So, Commissioner Powers, this is the slide that I was referring to, and this is kind of an overview of where we are in South Carolina in terms of closing the digital divide.

When Marva talked about the three aspects of

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the digital divide, Commissioner Caston, it was basically access, which is the infrastructure piece; affordability, which is the other A; and then adoption, which is kind of the digital This piece is the access piece, the literacy. infrastructure piece, Commissioner Powers, that you were asking about.

We actually were the recipient of a large federal grant to move into much lower-density areas or rural areas, last year — the Rural Digital Opportunity Fund. And it was \$112 million of FCC subsidy money for us to move into thousands of rural census blocks in South Carolina. It's a multi-year project.

The way that the South Carolina slide is presented to you today, it shows to you in dark blue our existing network; and then, in the green, it shows the census blocks that are wholly unserved, that we committed to build to with the federal subsidy. And the bigger portion of that was actually a private investment from Charter. The federal subsidy was the smaller piece. Our investment from Charter is a much larger piece on those.

But when it comes to actually getting there,

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which I think was the heart of your question, you can really only get fiber to a home one of two ways. We're not doing it through the air, we're not doing it wirelessly — which is another option or through a satellite; we're actually delivering a fiber-optic cable, which is the gold standard of delivering broadband, because it provides gigabit service to homes, which is future-proof. 30-year technology. It's not something that's going to be overrun. We want to get that fiber there. You can do it underground through the existing rights-of-way, like the highway transportation

system in some cases. You can bury it underground or you can connect to the existing infrastructure of utility poles. Utility poles were put in place for, of course, the telecommunications system, but that's where we can quickly and rapidly deploy our fiber-optics on a very fast basis. It's a faster way to go than having to dig through rock and dig through gas lines and everything else.

So those are the two ways. But when you talk about the highway system, most of those utility poles run along the highways, of course, and as you expand roads probably our utility owners are going

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to expand the utility pole system, as well, so...

In terms of the current network, we are actually, in a multi-year basis, going to be going, again, to reinforce the green, these wholly unserved census blocks, over a multiyear project with the subsidy we have from the federal government. So we look forward to doing that, and we'll expand a little bit more on the next slide, in terms of how we're planning on doing that.

[Reference: Presentation Slide 14]

MS. MARVA JOHNSON [CHARTER]: We have a historical opportunity that we didn't anticipate, even, when we won the Rural Digital Opportunity Fund reverse auction over a year ago. We now are looking, on top of the investment that the Federal Communications Commission has committed in extending broadband to wholly unserved census blocks, there's now multi-- tens of billions of dollars available that many of our states are also using to further extend broadband in unserved areas.

And so, for the State of South Carolina, not that all of this money is necessarily being allocated for broadband — some portion of it will be in — we're using these numbers to demonstrate

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sort of what the universe of potential is. For South Carolina, that's nearly \$2½ million worth of ARPA money, the American Rescue Plan money, that's available here, and then another billion dollars was given to the counties directly under the American Rescue Plan, and then some of the municipalities also received funding that totals about \$191 million in funding. All of these funds not specifically for broadband deployment, but still funds that are available, some portion of which could be used to service broadband.

And, you know, I was introduced earlier as the Group Vice President for the Southeast Region, so when I look across the region, my nine-state region starts with Maryland and it's basically the Southeast, the nine states that make up the Southeast, that's, you know, over \$37 billion in federal funding at the state level and another \$15 billion at the local or county level and then another \$5 billion in the local municipalities. we really do have a historical opportunity to take some of these funds and use them in a way that extends that full broadband access and connectivity to every citizen in South Carolina.

CHAIRMAN J. WILLIAMS: Ms. Johnson, if I may.

If you could go back to that slide — the money slide, if you will.

MS. MARVA JOHNSON [CHARTER]: [Indicating.]

[Reference: Presentation Slide 14]

CHAIRMAN J. WILLIAMS: Is there any way for you to give us a picture, paint a picture, of what we should expect to see in a few years, in terms of broadband in rural areas or underserved areas across the State, based on all the money that's available? Because I've been hearing about all the money that's available for broadband, and so I'm just curious to know what should I expect to see in three to five years, after this money has been used to increase access to broadband?

MS. MARVA JOHNSON [CHARTER]: All right. I can certainly share with you, from Charter's perspective, what we think the opportunity is. And we have a slide a little bit later that talks specifically about some of the funds we believe may be allocated in South Carolina, and it's about \$400 million that we're looking at right now.

There are estimates that say that it might take as much as \$2 billion to build out full access to all of the remaining homes. However, for Charter's perspective, what it would look like at

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the end of five to six years is, really, full access, like you have utility access for your electric service at most locations. The expectation is not by one single technology but by a combination of technologies, every address should be serviceable.

So as we think about extending fiber and as has been mentioned, fiber is the gold standard, because it is going to give you some not just resiliency in terms of the quality of the service, but, you know, we are also looking at a network that's going to be pretty much future-proof, but the truth is that fiber is not going to be able to get to every location. So the fact that SpaceX is also extending their network through satellite should — you know, when you've combined satellite-Internet-service, fixed-wireless-service, and wired-fiber-to-the-home networks, we really should have ubiquitous access within the next, you know, five to six years, for South Carolina.

That's a Charter's perspective, but we can certainly talk a little bit more about what that investment would have to look like for that math to come true.

CHAIRMAN J. WILLIAMS: Thank you.

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COMMISSIONER CASTON: If I may, I wanted to make sure I understood that, too. You're saying fiber-optic, and I think Mr. Breazeale said was the gold standard. And you just said satellite, potentially satellite, which kind of sounds like a satellite phone to me. Did you say anything about like cellular tower or like 5G or — I may have missed that, or maybe you did, or didn't. I wasn't sure.

MS. MARVA JOHNSON [CHARTER]: You didn't miss I actually — we, as has been noted earlier, and as Mike noted, we're actually working to provide wireless service, even, ourselves. And we do partner with Verizon on our MVNO at this point in our network evolution. But Charter, as a cable operator, as a broadband service provider, is also extending 5G network technology, as well, and we have a strong appreciation for the value of that wireless technology and we do believe it's essential to our ability to best serve our customers. However, the truth is is that that wireless service has to come back for backhaul to a wired network. So as we make investments, we believe that our wireless network will be strong because of the wired fiber network that's going to

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be backhauling that traffic and enabling those wireless speeds.

COMMISSIONER CASTON: So, if I'm understanding you correctly, you're saying that it would be not just one thing but, I guess, to fully cover the State would require multiple forms, whether that's satellite, whether that's fiber-optic, whether that is cellular. And I'm assuming when you said that back - backfeed, or whatever -

MS. MARVA JOHNSON [CHARTER]: Backhaul, yeah. **COMMISSIONER CASTON**: — that just goes back to somewhere where you've got fiber-optic, or whatever.

MS. MARVA JOHNSON [CHARTER]: Exactly.

MR. MICHAEL CHOWANIEC [CHARTER]: And,

Commissioner, if I may, I think your perspective on this is absolutely right. It's going to ultimately - we're here before you as, obviously, a major service provider and a major investor in the State, but there will be others, right? And those others will, in fact, do deployment that looks similar to ours in terms of wireline deployment. But as you suggested, the circumstances in these areas, particularly, can be challenging, right? The economics and the circumstances in terms of

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where you may have other utility network to piggyback off of, right, create obstacles. And so the satellite component and the wireless component generally provided by others is going to have to be part of the solution, right, because you're not going to get there exclusively on the basis of wireline service, because the math would potentially be cost-prohibitive. And in some cases, the infrastructure isn't set up in such a way that you could extend wireline to certain areas, even if you wanted to pay almost any price.

COMMISSIONER CASTON: Uh-huh.

COMMISSIONER C. WILLIAMS: Chairman Williams, I'd like to piggyback on your question.

Ms. Johnson, when you talked about the fiveto-six-year window, was that for Charter's investment? Or was that what you — was that related to those other providers that won RDOF monies, as well?

MS. MARVA JOHNSON [CHARTER]: This is really just Marva's - yeah - Marva's best guess, because at the end of the day it really depends on how fast we can go. And that is dependent upon how much incremental investment the State is willing to make, the federal government is putting in, and

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then how much additional private-sector capital will come to bear.

If you look at the Rural Digital Opportunity Fund, the service providers that were awarded the locations to build out in that reverse auction have six years to build to these areas that are wholly unserved, census blocks with no service.

Ben will talk a little later about some of the things that we're doing in order to make sure that, as we build and anchor our networks in these areas that are wholly unserved, we optimize the investment we've made to try to add more locations to these builds. And we'll talk about Florence County, how we're working with some of the local leaders to say, "We're going to be building in this We'd like to extend service throughout your area. county as fast as we can get there."

We could either partner with the county themselves or work with the State through the State grant program, so that we can try to get as close to universal access or full access in each of these counties as we can, as fast as we can, but a lot of it is going to be dependent on the tolerance for investment and, as Mr. Chowaniec noted, how quickly we can extend the plant. It's been noted earlier

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the fastest way for us to get our network using the technology that Charter uses in our network topography, is to attach to utility poles and to run our service aerially. You know, if we have good, easy access to utility poles, the faster we can go. Going underground is great. It's a great solution, but we can't always go underground. It's not, you know, a solution that works in every scenario, but it takes longer. So it really is contingent upon how much we're willing to invest and continue to invest to lean in on the problem.

CHAIRMAN J. WILLIAMS: Ms. Johnson, I didn't mean to turn your seat into the hot seat, so this question is for the entire panel or for you if you want it. I understand there's six years for the build-out. Is there options to walk away? Since this is sort of new and some of the companies are going into unserved areas or areas with no access — unserved, as opposed to underserved — what if a company finds that this was a whole lot harder than we thought it would be? What happens then, if they decide that they don't want to pursue that course of action anymore?

MS. MARVA JOHNSON [CHARTER]: Yeah, I'm going to take the hot seat, but I'll share it with Mr.

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Chowaniec. The best time for a company to walk away from a Rural Digital Opportunity Fund commitment would have been before — is actually before your long form is approved.

So one of the things that we had to do after winning the awards was submit a long form, which has much more substantial information about our plans to build out. And there were penalties that you would suffer before your long form is approved, but after your long form is approved those penalties escalate. So, you could end up paying back any monies you receive plus a penalty of up to like 85 percent of what the award was.

So, could a company walk away? Probably. Would it be financially advised? It probably wouldn't be. I'm sure it would depend on the situation.

For Charter, we are looking at this as a commitment we plan to fulfill, and we tried to make sure of it when we got to the point where our long form was being considered. We are ready to execute on the remaining obligations.

MR. MICHAEL CHOWANIEC [CHARTER]: The only thing — everything Marva said is true. The only thing I would add, you know, to that is we filed a

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couple of supplemental, you know, filings with your agency over the last few months because we did a more careful review of our RDOF commitments and there were certain years where, based on just a snapshot in time, you know, the FCC, let's say, was identifying buildings that didn't exist, right? Or they were identifying areas as unserved that were, in fact, served, right? So we took that list very seriously and we scrubbed it with the understanding, as Marva said, that this was a real commitment. And from your perspective — and I've been there at one point in my life, you know, on the public-sector side — the penalties are real and they are intentionally severe, right, because the expectation was that when you, as a service provider, commit to this, you know, that you're honoring that commitment, right? So I would - dare I say, you know, they're punitive is, I guess — and I think rightfully so, right? The expectation should be that, if a company, you know, made the commitment and potentially others were eligible, right, to make the commitment and were not awarded the funds, that, you know, we and others will honor that commitment.

CHAIRMAN J. WILLIAMS: Thank you.

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And I'm going to go back to the PowerPoint, but I do appreciate the questions, and I meant to say it at the opening. We love to have questions throughout the presentation, but I don't have to say that to you-all, so thank you.

[Reference: Presentation Slide 15]

MR. WILLOUGHBY: So that brings right into the segue goes into what has the South Carolina General Assembly done to promote broadband distribution throughout the State to bridge the digital divide. And about a year and a half ago, as you are aware, the General Assembly — and it was immediately signed by the Governor — passed South Carolina's Broadband Accessibility Act of 2020. I'll refer it to as the BBA from time to time.

And on this slide you have in front of you now, in the lower left-hand corner, is a quote from Governor McMaster, and I think it sums up the public policy of the State. "Broadband connectivity is a powerful catalyst for economic and social advancement. It is no longer a luxury it is a necessity, critical to ensuring a level playing field for those in rural areas."

So the goal is, to someone growing up in

access available to them.

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ACCEPTED FOR PROCESSING - 2022 March 31 3:45 PM - SCPSC - ND-2022-6-C - Page 42 of 72

And that is the focus, Chairman Williams, without any question. That's what the General Assembly's objectives were.

And so how we're — it's always means and methods. So what is the methods by which the General Assembly says, "We're going to try to accomplish this," or, "We're going to incentivize service providers to be able to do it"? You've talked about - you've heard others say here, this morning, about the gold standard is the

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connectivity of being able to use fiber-optic cable, to - and the reason fiber-optic, it's been around for a little while, but fiber-optic, or glass leads inside the cables, and these have the And we capacity to transmit great amounts of data. are in a data-driven world at this point. Businesses are constantly capturing data. You hear all kinds of information dealing with the ability to transmit data.

So that's what you need to do, is be able to use fiber-optic cable. And even if you have a wireless connection at some point, you're going to have to come back to backhaul; you're going to have - fiber-optic connection, in this day and age, is going to be a great part of that distribution of those communications signals.

So how are we going to do it? We can't just go out and start laying wire in the middle of a Obviously, you've got to coordinate with government officials to do that. And you can't get to the young man in Chester that might be on the end of a line because he's not on an interstate highway and could be still down a dirt road at this point in time. Hopefully not. At least that road I grew up on has been paved at some point in time.

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They waited until after I left, Commissioner, before they paved it, but my 93-year-old mom still lives down that road and she's glad to have that road paved today, and I'm glad for her.

So what are we going to do and what are the needs? Well, we need nondiscriminatory access to the existing rights-of-way. The General Assembly made the determination that these rights-of-way have been developed, in many cases, with federal supporting funds, low-cost loans, any number of Could be aerial. In most of the cases, it will be aerial. And as you heard Marva talk about, aerial is less expensive; it's more widely available. And, yes, you can put it underground; it costs more, takes longer, but that's an option. But not — it's going to delay the implementation and distribution if you're underground, and it's going to be more expensive if that's the way. So you've got to have nondiscriminatory access to existing poles and rights-of-way. Gotta have the rights-of-way. You can't just start laying cable across someone's private property. Just and reasonable rates, terms, and conditions. To be able to do that, what are you going to have to pay for the right to attach to existing pole owners'

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rights-of-way on their existing poles? So that's got to be just and reasonable rates. And, obviously, the Public Service Commission has been involved with developing rates and approving rates and terms and conditions, and you are given responsibilities in connection with the Broadband Accessibility Act in that regard, as well, if there's a dispute about those.

How quickly can you do it? What sort of timelines? Can people intentionally try to delay the distribution for one reason or another? General Assembly adopted the FCC make-ready timelines and requirements. They did that by incorporating by reference, Commissioner Williams and Vice Chair Belser and Mr. Powers, they incorporated by reference FCC regulations that set out those timelines. Those timelines had been widely used for a period of time; they'd been approved; they're uniform; they're widely known. So we want to get distribution done quickly, so we're going to adopt these make-ready timelines.

And "made-ready" is a major part of the issue. So, you approach a pole owner and say, "I need to attach to your poles that exist there today," and obviously the pole owner has obligations and

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requirements, and they want to make sure that the attachments are being able to be done in a safe way, that there's capacity on those existing lines. Sometimes there's insufficient capacity and your make-ready refers to being able to say, "I will make these poles ready to receive my digital attachment." And the terms and conditions of that will be important things that can either delay or facilitate the speed at which it will move forward. Uniform pole standards. Everybody is focused on the General Assembly adopted as a reasonable

standard the National Electric Safety Code. And so there will be questions, if you comply with standards of the National Electric Safety Code, is that good enough? And there will be, perhaps, varying points of view on that, but we believe that the National Electric Safety Code is the standard.

And then your involvement in that process, if agreements can't be reached in the field, where direct negotiations are ongoing or should occur, then if there are disputes for access, then this Commission has the power to resolve those disputes.

And I'll give you just a little more detail. So, Marva, if we'll go to this next slide -COMMISSIONER POWERS: Mr. -

[A/V] AUDIO- AND/OR VIDEOCONFERENCED PARTICIPATION

COMMISSIONER CASTON: May -

COMMISSIONER POWERS: — Chairman?

COMMISSIONER CASTON: — I stop you just one

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MR. WILLOUGHBY: Sure.

COMMISSIONER CASTON: If I may, Chair? pole — the rapid pole attachment, which I think I understand that, you can do it quicker. You know, the thing with water and wastewater, we didn't have a choice, although we did find some of the fiberoptic cables pretty expensive to fix those. said, I know through the course of time there's been debate back and forth about overhead, whether it's communication, electric lines, you know, should they be underground? Some people say, "Well, they're ugly. We ought to put them underground," and others say, "Well, storms, you know, they're going to be knocked out. It's better to do that." Is that any consideration in this process?

MR. WILLOUGHBY: Well, I would think that all of those things are worthy of consideration, Commissioner, without any question. Like with everything, time is critical. The faster you can make the distribution of the new infrastructure,

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the better.

Cost, regardless of the fact that the federal government and states, to some degree, have devoted funds for the purpose of improving broadband infrastructure, distributing fiber-optics, nevertheless the supply of money, I've always found in my life that it's always limited. So funds are limited, as well.

So, the question becomes how much would it cost to go underground versus using existing right-of-way to attach it to existing poles, and do you have the funds to make the choice? So, but those things will certainly be considered and you might have multiple applications. You might have applications where it runs aboveground and on poles for some part of a right-of-way, and then runs underground through other parts of the rights-of-way. But, obviously, that deployment in the field will be something that the engineers will look at very carefully as to what is the most prudent and safe installation method that may be available, given the right-of-way and the limitations that might exist there.

MR. BEN BREAZEALE [CHARTER]: And, Mitch, I can — Commissioner, I can weigh in, as well. I

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hope I'm not redundant, but your question is a perfect one. The issues that you-all have to weigh when it comes to broadband deployment into rural

areas are issues of safety in hurricanes, which is much better underground, obviously; issues of beautification, which is the unsightliness in The rule that we've heard from the neighborhoods. Legislature and from the Office of Regulatory Staff, as well, the Broadband Office, is speed is the number one consideration that we heard from the Legislature, and that is because of the great cost of a six-year-old not having broadband for an

additional year but, by far, you know, underground 13 14

is a great way to go. It takes longer to do that,

because of the obvious reasons, based on your experience as well, obviously.

> CHAIRMAN J. WILLIAMS: Commissioner Powers? **COMMISSIONER POWERS**: Thank you, Mr. Chairman.

Mr. Willoughby, obviously, you've looked at this closer than I have at this point. You start talking about pole disputes. I'm assuming that's something that our hearing officers can decide, or is that something that would be good for mediation or arbitration, or how do you see that playing out?

MR. WILLOUGHBY: Well, all of those

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mechanisms - in fact, if we'll go to the second slide that we have up here.

[Reference: Presentation Slide 16]

Yes, right here. All of those mechanisms are available, Commissioner Powers. There are two methods. Rapid pole attachment dispute resolution, so the Act provides two methods for dispute resolution within it. And one method is to come directly to the Commission. You know, if you've negotiated with a party, you have to notify an owner of poles that we need access to your poles, and you send a writing to them saying, "I want access to your poles," and you have to negotiate with them for a period of time, but if you reach an impasse where you're unable to agree to a contract, then you're able to come to the Commission. there are fairly - not "fairly." There are statutory deadlines by which the Commission must receive the petition to resolve the dispute and hear that dispute, go through the discovery process and have a hearing.

And a hearing officer might be able to do some of the normal things that a hearing officer does, dealing with discovery issues and the like, but ultimately the dispute resolution lies with the

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Commission, and so the Commission would have to hear the case and make a ruling and issue an order within the statutory deadlines.

There's also a mechanism whereby you can go to ORS or you can submit an issue to ORS, and ORS can attempt to mediate that to any disputes, and there is a process to go through that. But at the end of that day, if the mediation still believes leaves the parties with different points of view and they're unable to resolve their issues, then the Commission ultimately is the one that you come to to resolve the dispute.

So there are two avenues. One comes directly to the Commission, one employs the mediation services and capabilities, and ORS does some other things in that process that's defined by the statute, as well.

So the General Assembly made it clear, as I pointed out earlier, that they want — one of the things is efficiency, and they want it to get to unserved areas as quick as possible.

And I might say to Commissioner Caston, my 93year-old mother that lives, still, down that same road that I grew up on, if her children were still living with her - and, of course, they are not -

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But the key here today and what the General Assembly did, dealt with, is trying to make sure that the unserved areas are quickly served. As the Governor said, it is no longer — it's not a luxury; it's a necessity, to ensure a level playing field for those in rural areas. The goal is to have every child, every person that needs telemedicine, educational opportunities, business opportunities,

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that we are able to develop every nook and cranny of the great State that we all love and serve. And that's one of the goals that the General Assembly had for broadband deployment.

And I'll go back to this slide very quickly, and we'll conclude. Uniform standards, National Electric Safety Code. Not a hodgepodge where someone has a standard over here, and another standard over here. National Electric Safety Code. A lot of these pole owners are electric providers, so they wanted to make sure that there was safety, that make-ready standards were there, and then the FCC timelines where the goals of "Let's be able to do it quick and here's the tool we're going to use. It's already available to us. Let's adopt those tools in terms of timelines, and move forward with that."

And as you see on this slide, the Act is designed with efficiency and rapidity of broadband deployment in mind. That is the goal underpinning this Act.

I'll turn it back to Marva.

[Reference: Presentation Slide 17]

MS. MARVA JOHNSON [CHARTER]: Thank you,

Mitch.

And thank you, again, Commissioner Caston, for
that question, because — and I just wanted to
underscore a point that both Ben and Mr. Willoughby
made, in that when we look at going underground, it
is not just, you know, more expensive, but most
importantly, if our goal is to be efficient and get
out rapidly, it takes more time. And so as we look
to deploy our network, we're doing both. We're
going aerial, we're going underground. But we're
trying to get service out as fast as possible, is
really what is underscoring our efforts. And so as
we also think about the efficiency portion of it,
if it costs more to actually go in and trench,
and — you can't actually go underground everywhere.
The geography has, you know, some limitations. We
run into problems with railroad crossings and other
things like that. But just assuming the geography
is conducive to undergrounding, if it costs more
and we're looking at how do we get service out — do
we finish in five years, do we finish in seven
years, do we finish in ten years with our goal of
having service to everyone, there's a finite amount
of money. So how fast can we build is number one.
And then how far can we stretch the money is number
two.

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And when we look at this slide, which is our assessment — or, really, it's really a comparison of what investments are being made across my region, which is the Southeast region. South Carolina is very well positioned. On top of the CARES Act projects and other investments the State has made in deploying broadband, I think we're looking now at the opportunity, perhaps, for as much as \$400 million to be invested, to get to the remaining 450,000 locations.

You can see how that investment compares to what some of the other states are investing. We, of course, know the math, that \$400 million is not going to get us all 450,000 served, but it's going to make good progress. And if you looked at some of the investments on top of these efforts, including the Rural Digital Opportunity Fund, then we start to put together a package that allows for this capital to go as far as we possibly can and reach as many homes as possible.

COMMISSIONER THOMAS: Mr. Chairman.

CHAIRMAN J. WILLIAMS: Commissioner Thomas.

COMMISSIONER THOMAS: Thank you.

So I assume, since we're talking "rural," that you're going to be dealing with a lot of the

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electric co-ops and relationships with the co-ops in order to be able to get these pole attachments. So, I would assume that what you're trying to do is come up with an agreement, kind of a high-level agreement, with the co-op for their entire area, and it's not like neighborhood by neighborhood or something like that. And, so, I guess I'm just wondering how is that going? I don't remember how many co-ops there are in South Carolina. It's a pretty good number, I think. Maybe 20 or 25. And are you trying to get an agreement with all of those that may impact your area, and are you having good progress with that? What's going on with that?

MR. BEN BREAZEALE [CHARTER]: Yes, sir,
Commissioner. There are 20, and some of them have
entered into the broadband business, some of them
have not. So that's two different categories,
probably, of, you know, entities that we need to
deal with. But it's going well. The areas that
we've started deploying service, in particular, we
have some really good relationships with
particularly the co-ops in the Pee Dee region, for
instance. Those relationships are going really
well. I sat down personally with two of the CEOs

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in that region, and they were very forthright.

They're not in the broadband business there, so that helped, because they didn't have any additional business competing, you know, with the poles that they were going to give us access to.

So that was very helpful. But those are going very well.

I think that Mitch was talking about the National Electric Safety Code standards. I think a universal standard from the Broadband Accessibility Act is extremely helpful. They are following those standards, as far as our construction folks in the field are telling us. They're approving pole permits very rapidly, which helps us out a lot, even better than some of the FCC standards that were incorporated into the Act. And, obviously, if there's a mile of fiber, there's 18 polies in that mile of fiber. Every one of those poles has to have approval from that pole owner for safety purposes, to make sure that we get a permit back. If they're processing 25 poles a week, that's a little tough. If they're processing 50 or 75 poles a week, that's better. Because we've got to get tens and fifties and hundred miles of fiber, based on our commitment, lined up, so we can get that

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bucket truck you saw in the picture and just knock them out. If we have all the permits, we can knock them all out, kind of in a row, and go miles per day rather than feet per day.

So that's an important relationship, but it's — the ones that we're working with right now are going well, and there's others that maybe Mike wants to talk about, or Marva, that maybe we don't have the same working relationships now, but we are absolutely working to have that with all of them.

I don't know if there's any other -

MS. MARVA JOHNSON [CHARTER]: We can talk about it more as we go through.

MR. BEN BREAZEALE [CHARTER]: Okay. I hope that answers your question.

COMMISSIONER THOMAS: Very good. Thank you.

MR. BEN BREAZEALE [CHARTER]: Yes, sir.

COMMISSIONER THOMAS: I appreciate it.

COMMISSIONER POWERS: Mr. Chairman?

CHAIRMAN J. WILLIAMS: Commissioner Powers.

COMMISSIONER POWERS: And I'll try to hush in a minute. I noticed that, you know, growing up in Marlboro County, Marlboro-Dillon area, that a lot of, on your map, is green for those areas. So, I assume, when you say the Pee Dee co-ops, you're

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dealing with those co-ops in Marlboro, Dillon, up in at area?

MR. BEN BREAZEALE [CHARTER]: Yes, sir. Dee Electric and Santee Electric were the two I was referring to, that I sat down directly with, and they were very forthright. We had very good meetings, and I have no reason to think that we're not going to work great together to get what we have to get done down there.

COMMISSIONER POWERS: Years ago, having worked with the development for a rural county, I guess now it goes without saying, if you don't have broadband, you're going to have a hard time attracting industry and other things with your schools and, of course, telehealth, I think you mentioned, as well.

MR. BEN BREAZEALE [CHARTER]: Yes, sir.

COMMISSIONER POWERS: Thank you.

MR. BEN BREAZEALE [CHARTER]: Uh-huh.

This next slide is picking up a little bit on your questions there.

[Reference: Presentation Slides 18-19]

It goes - maybe the - yeah, it goes into all of the work that has to go into this, and I kind of covered it when I was answering your question,

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[A/V] AUDIO- AND/OR VIDEOCONFERENCED PARTICIPATION

And there's two final slides that we'll

Commissioner Thomas. But most of the work, even under the best-case scenario in an aerial deployment, is not visible to the eye. Seventy percent of the work is actually getting these pole permits approved through a process of deploying the fiber. The last 30 percent is actually tacking up the fiber and delivering the process to the - the fiber to the homes. What we do when we do a deal and go out and talk to a local government, talk to local pole owner, is we actually design that project, and then we actually send subcontractors out to walk every single pole line, to walk it out, to put their eyeballs on every structure that we're going to build to, so we know the exact poles that we need to get to, where we need to go underground if there's not pole infrastructure there, or if we can't work out a deal with the pole owner.

So all of that walk-out and all of that design and all of that pole permitting is, by far, the hardest work, even under the best-case scenario, under an aerial deployment, that's a lot of time that goes into deploying this. But we're doing it, as I talked about; we're meeting with the co-ops, we're meeting with the local governments.

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present to you today. I can go to the next slide, just to tell you.

[Reference: Presentation Slide 20]

In addition to the RDOF that we won, we are trying to synergize on that federal money and do individual deals with counties who also got ARPA money. So, the RDOF money covered certain unserved census blocks in multiple counties across South Carolina. What we've done is, in four counties in particular - we've gone out and talked to many, many counties — in four counties, in particular, we've shown them the census blocks in their county that will be covered by our investment and the RDOF investment, and asked if they wanted to do a massive design across the county and contribute some of their ARPA funds to cover the areas that we did not get under the RDOF — the low-density areas.

These four counties, we have contracted with to complete the counties out. That is Dillon County, Darlington County, Florence County, and Cherokee County. And, in particular, obviously, the relationship with the pole owner was key in some of those counties, because we knew it was going to be easy to get permits and go fast.

[Reference: Presentation Slide 21]

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But those four counties, we have contracted over the next two years to not just do the RDOF, but to leverage the fact that we're already going to have crews in the area, to go ahead and finish out other neighborhoods in other low-density areas that are adjacent to the RDOF, so we can finish out the entire county. So we're very proud about that.

And we also are planning on participating in the State Broadband Office. We work very closely with the Office of Regulatory Staff, who now has the State Broadband Office as of July 1st. We're planning on participating — we participated in their grant programs in the CARES Act and we're planning on participating in their State grant program I think that they're anticipating to have later this year.

So we're trying to make sure that all of these federal programs work in tandem with each other, so we're not building over top of other folks and federal money is not fighting other federal money. That's the point of this slide.

The last slide is just to show you, in particular, maybe a little bit of detail on how this works. But what you can see in Florence County — and you can read the information about the

deal we have there — the blue areas are where we
had RDOF, which was already funded projects on a
timeline where Charter was building to these
unserved areas with federal subsidy; the red areas
are where the county — we did a design with the
county and did a walk-out, and they were also
unserved areas, but we just didn't win those areas
in the auction. So the county allowed us to go do
a design for further unserved areas, and we're
working with the Office of Regulatory Staff, as
well, with their State Mapping Office, which they
are fantastic. They have great maps there to try
and get to the unserved areas of the county. So
that's what we call a synergy project. We can
take, leverage the investment that we've made with
the RDOF program, and layer on top of that other
monies that are coming through the ARPA program.

With that, I'll conclude my comments. And, Marva, if you want to make any final comments, we'll take additional questions.

MS. MARVA JOHNSON [CHARTER]: Thank you.

I mostly want to thank you-all for your attention and for the opportunity to share where Charter is going as it relates to our commitment to closing the digital divide. I want to thank you,

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Chairman Williams, for including us, and Vice Chair and Commissioners, for giving us your attention today.

Ben's last comment is something that's fairly significant to us. We talk about how long it's going to take, and we talked already about needing to go as fast as possible and, in order to get to as many homes as possible, we had to be efficient with our investment. So, it is a concern for us, Chair Williams; you asked about whether we truly have an obligation, what's the risk if we don't build our RDOF locations. We certainly have meaningful, substantive penalties; and as we look to continue to extend, not just to build the locations we committed to but to do them as fast as possible — the law allows six years; we don't want to take six years; we want to go as fast as possible - we're trying to find ways to make accelerating that investment make sense.

So the way for the State, I think, to be most efficient is to make sure that, as we allocate some of these additional funds that are coming forward, we allocate those funds in areas that don't already have money allocated to them, so that, as has been noted, we're not fighting federal dollars with

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State-allocated federal dollars, so that everybody's going as fast as we can possibly move to every single location that needs service.

So we really appreciate the opportunity. We appreciate the commitment that you-all are making and the State of South Carolina is making, to make sure that every citizen has service, and we're happy to be a part of it.

Any other questions?

COMMISSIONER C. WILLIAMS: Chairman Williams?

CHAIRMAN J. WILLIAMS: Commissioner Williams?

COMMISSIONER C. WILLIAMS: Thank you.

Thank you for bringing this to us. It's exciting to get to kind of hear this in first person. My first question has to do with the map that you gave us on page 13 of the PowerPoint. And as I read it, the dark — the medium blue, it says "County currently served by Spectrum network."

Does that mean you cover the entire county? Or does that mean you —

MR. BEN BREAZEALE [CHARTER]: No, ma'am. No — COMMISSIONER C. WILLIAMS: — cover a piece — MR. BEN BREAZEALE [CHARTER]: — ma'am. The — COMMISSIONER C. WILLIAMS: — of it? Okay.

MR. BEN BREAZEALE [CHARTER]: — medium blue is

1	probably not the perfect way to show that. That's
2	a graphic that we've used in the past. It means we
3	touch a corner of the county —
4	COMMISSIONER C. WILLIAMS: Okay.
5	MR. BEN BREAZEALE [CHARTER]: — or serve
6	somewhere in the county.
7	COMMISSIONER C. WILLIAMS: Okay.
8	MR. BEN BREAZEALE [CHARTER]: And we use it
9	for different purposes, but that is — thank you for
LO	asking. That could be misconstrued.
L1	If it's medium blue, it just means that we
L2	serve — we have a franchise with the county and we
L3	serve some portion of the county. The more
L4	important part of that map would be the dark blue —
L5	COMMISSIONER C. WILLIAMS: Right.
L6	MR. BEN BREAZEALE [CHARTER]: — which is where
L7	our network serves broadband. And, of course, the
L8	green, which is where we've committed to build
L9	under the RDOF 904 auction program.
20	COMMISSIONER C. WILLIAMS: Okay. Thank you —
21	MR. BEN BREAZEALE [CHARTER]: Thank you —
22	COMMISSIONER C. WILLIAMS: — for that —
23	MR. BEN BREAZEALE [CHARTER]: — for asking.
24	COMMISSIONER C. WILLIAMS: Thank you for that
25	clarification.

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COMMISSIONER C WILLIAMS	T'm	not	sura	∠ 1

best way to ask this, but you — what share of the 450,000 South Carolinians are you likely to cover in the next six years? You can change that question around, like if I should've asked by census tract or in some other way.

MR. BEN BREAZEALE [CHARTER]: You mean, Charter? Or all of the industry?

COMMISSIONER C. WILLIAMS: Well, if you can answer both, wonderful, but I really am asking about Charter.

MR. BEN BREAZEALE [CHARTER]: You have a great resource in South Carolina — the Office of Regulatory Staff, the State Broadband Office — who would be able to answer that question, you know, better than I. But I think the most recent statistics from the Office of Regulatory Staff show 450,000 South Carolinians, but I think it's around 180,000 structures. So houses versus citizens, I guess is what I would say.

We have committed, under the Charter 904 auction RDOF program, just Charter has stepped up to somewhere around 80-90,000 of that 180,000 unserved structures. Now, mapping, of course, is

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somewhat of an art. You know, you have to walk
out — the ones in Florence, we know, because we
walked out; we walked every pole line, we looked at
every structure. But in general, if those numbers
stay in place, Charter has about 50 percent of the
unserved households, if all of those numbers are
sound. And I would definitely check with Jim
Stritzinger at the Office of Broadband, to make
sure those numbers are right. But that's the rough
cut, if that helps.

COMMISSIONER C. WILLIAMS: That's exactly what I was asking. Thank you.

My last question is kind of hypothetical, but it's to help me understand the challenges of underground service. If — and I realize this is unlikely to happen, but if you were moving into an area that already had underground utilities, does that change the cost dramatically?

MS. MARVA JOHNSON [CHARTER]: We actually
usually follow the utilities, just -

COMMISSIONER C. WILLIAMS: Okay.

MS. MARVA JOHNSON [CHARTER]: — as you noted.

So -

COMMISSIONER C. WILLIAMS: Okay.

MS. MARVA JOHNSON [CHARTER]: - if the

[A/V] AUDIO- AND/OR VIDEOCONFERENCED PARTICIPATION

1	utilities are already underground, we're going
2	underground —
3	COMMISSIONER C. WILLIAMS: Okay.
4	MS. MARVA JOHNSON [CHARTER]: — because we
5	don't actually own the poles; we're always
6	attaching to the utility's infrastructure in that
7	sense. So if they're on poles, we go on the pole.
8	If they're underground, we're happy to go
9	underground, as well.
10	COMMISSIONER C. WILLIAMS: Okay. Thank you
11	for the clarification. Thanks again for being
12	here.
13	No further questions.
14	COMMISSIONER CASTON: Chair Williams?
15	CHAIRMAN J. WILLIAMS: Commissioner Caston.
16	COMMISSIONER CASTON: To build on Commissioner
17	Williams' question, because I just heard numbers,
18	like the 450,000 population. That's the estimated
19	population in South Carolina that doesn't have
20	broadband service, correct?
21	MR. BEN BREAZEALE [CHARTER]: Yes, sir.
22	COMMISSIONER CASTON: And I heard you talk
23	about structures.
24	MR. BEN BREAZEALE [CHARTER]: Yes, sir.
25	COMMISSIONER CASTON: And I tend to think of

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that as, you know, a customer - I - okay, we had a, say, a meter at a structure. Depending on the enumeration district or whatever, it may be 2.8 people per structure. So I guess what I'm trying to determine or get a feel for, 450,000 people, and you said that many structures, what population is that? What percentage of that 450,000?

MR. BEN BREAZEALE [CHARTER]: If you do the rough cut of 5 million South Carolina citizens and 450,000 citizens without it, it matches up with the 91 percent served or 9 percent unserved by the FCC's calculations. So you did the math perfectly. I'm not a mathematician; obviously, you are. But I did the quick math and I think it matches up with what you were saying: 170-180,000 structures equals 450,000 citizens. That's about 2.6 or 2.7 citizens per household. I think that's how the math works, Commissioner, but forgive me if — again, I didn't get an A in math.

COMMISSIONER CASTON: I probably didn't, either.

[Laughter]

Thank you, very much.

MR. BEN BREAZEALE [CHARTER]: Yes, sir.

CHAIRMAN J. WILLIAMS: All right. Any more

1	questions from Commissioners?
2	[No response]
3	Attorney Moser?
4	MS. MOSER: Nothing further.
5	CHAIRMAN J. WILLIAMS: Office of Regulatory
6	Staff.
7	MR. HUBER: Nothing further from ORS. Thank
8	you, Mr. Chairman.
9	CHAIRMAN J. WILLIAMS: Ladies and gentlemen,
10	thank you so much for joining us today. I think
11	it's fair to say we enjoyed your presentation. It
12	was very informative, and we appreciate you taking
13	the time to come and present to us.
14	If there's nothing else, we are adjourned.
15	[WHEREUPON, at 11:58 a.m., the
16	proceedings in the above-entitled matter
17	were adjourned.]
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ACCEPTED FOR PROCESSING - 2022 March 31 3:45 PM - SCPSC - ND-2022-6-C - Page 72 of 72

CERTIFICATE

I, Jo Elizabeth M. Wheat, CVR-CM-GNSC, Notary Public in and for the State of South Carolina, do hereby certify that the foregoing is, to the best of my skill and ability, a true and correct transcript of all the proceedings had regarding a requested allowable ex parte briefing in the above-captioned matter before the PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA;

IN WITNESS WHEREOF, I have hereunto set my hand and seal, on this the 30^{th} day of March , 2022.

> Jo Elizabeth M. Wheat, CVR-CM/M|GNSC Hearings Reporter - Public Service Commission of South Carolina

Notary Public in/for the State of South Carolina My Commission expires: January 12, 2031.